PROJECT DESCRIPTION

<u>GENERAL</u>

THIS PROJECT INVOLVES THE CONSTRUCTION OF A TRAFFIC CONTROL WARNING SIGNAL. IT INVOLVES THE INSTALLATION OF NEW POLES, MAST ARMS, SIGNAL HEADS AND STREET LIGHTING AT THE INTERSECTION OF US 11 & BYERS ROAD AND US 11 & AIR VIEW ROAD. THE INTERSECTIONS ARE LOCATED IN WASHINGTON COUNTY. US 11 IS ASSUMED RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTIONS IS TO OPERATE IN A NEMA THREE-PHASE, PRE-TIME MODE. THE INTERSECTIONS WILL BE PRE-EMPTED UPON ACTIVATION IN THE FIRE ALARM CONTROL PANEL, HOUSED IN THE LIGHTING CONTROLLER CABINET. REFER TO SHEET E7.01 FOR LIGHTING CONTROLLER REQUIREMENTS.

CONTROLLER REQUIREMENTS

AN EIGHT PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH AND INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES SHALL BE HOUSED IN A NEMA "6" BASE MOUNTED CABINET. THE NEMA "6" BASE MOUNTED CABINET SHALL ALSO BE EQUIPED WITH BATTERY BACKUP POWER SUPPLY TO MAINTAIN THE TRAFFIC CONTROL SYSTEM UNTIL THE STANDBY ENGINE GENERATOR IS AT FUL VOLTAGE AND FREQUENCY.

PROJECT CONTACTS

CONTACT PERSON FOR DISTRICT 6 ARE AS FOLLOWS:

MR. GEORGE SMALL
ASSISTANT DISTRICT ENGINEER – TRAFFIC ASSISTANT DISTRICT ENGINEER
(301) 729-8444

MR. GEORGE FRANKENBURY
ASSISTANT DISTRICT ENGINEER
-MAINTENANCE (301) 729-8457

MR. WILLIAM PARK ASSISTANT DISTRICT ENGINEER - UTILITIES (301) 729-8439

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR. CHIEF, TRAFFIC OPERATIONS (410) 787-7630

MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS (410) 787-7676

MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS (410) 787-7631

MS. DARLENE EIDE SUPPLY OFFICE SIGNAL SHOP WAREHOUSE (410) 787-7668

MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS (410) 787-7652

CONTACTS FOR UTILITIES

MR. JAY S. MYERS ALLEGHENY POWER (301) 582-5267

MR. DENNIS SCHAEFER (301) 694-5646

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

NO EQUIPMENT SHALL BE SUPPLIED BY THE ADMINISTRATION

(THE CONTRACTOR IS REQUIRED TO SUBMIT CATALOG CUTS TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL OF ALL EQUIPMENT REQUIRED IN THE CONTRACT DOCUMENTS.)

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM	<u>QUANTITY</u>	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
203030	3 CY	TEST PIT EXCAVATION
585624	98 LF	24" WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKINGS
860272	16 EA	FURNISH AND INSTALL 12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION
831012	2 EA	FURNISH AND INSTALL 400 WATT HPS LUMINAIRE WITH PHOTOCELL
860270	4 EA	FURNISH AND INSTALL 8" VEHICULAR TRAFFIC SIGNAL HEAD
871201	2 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240V, 1PHASE, 3 WIRE SYSTEM)
805135	50 LF	FURNISH AND INSTALL 2" SCH 80 RIGID PVC CONDUIT-TRENCHED
801004	10 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	40 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
813015	36 SF	FURNISH & INSATLL OVERHEAD SIGN
837001	2 EA	FURNISH AND INSTALL GROUND ROD 3/4" DIA. x 10' LONG
861107	270° LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO 14 AWG)
861116	155 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 12 AWG) TYPE "TC"
822002	2800 LF	12 PAIR COMMUNICATION CABLE (UNDERGROUND)
866104	2 EA	20 FT LIGHTING ARM AS SIGNAL STRUCTURE
805140	110 EA	FURNISH & INSATLL 4" SCH 80 RIGID PVC CONDUIT-TRENCHED
807202	2 EA	FURNISH & INSATLL METERED SERVICE PEDESTAL
871117	2 EA	FURNISH & INSATLL EIGHT PHASE FULL - TRAFFIC - ACTUATED CONTROLLER W/INTERSECTION MONITOR
		HOUSED IN A NEMA "6" BASE MOUNTED CABINET
818021	2 EA	FURNISH & INSATLL 27 FT POLE WITH TWIN 50FT/50FT MAST ARM W/ ANCHOR BOLTS
861117	2800 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO 4 AWG)
	,	

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

US 11 @ BYERS ROAD

PRE-EMPTION WARNING	12" FL/Y	12" FL/Y	12" FL/R	12" FL/R	
PRE-EMPTION CHANGE	8" FL/Y QUICK FLASH	8" FL/Y QUICK FLASH	12" FL/R	12" FL/R	
PRE-EMPTION	12' Y	12' Y	12' FL/R	12' FL/R	_ _
	12' R	12' R	12' R	12' R	
NORMAL FLASHING OPERATION	12" FL/Y	12" FL/Y	12" FL/R	12" FL/R	

US 11 @ AIR VIEW ROAD

PRE-EMPTION WARNING	12" FL/Y	12" FL/Y	12" FL/R	12" FL/R	<u></u>
PRE-EMPTION CHANGE	8" FL/Y QUICK FLASH	8" FL/Y QUICK FLASH	12" FL/R	12" FL/R	
PRE-EMPTION	12' Y	12' Y	12' FL/R	12' FL/R	-
	12' R	12' R	12' R	12' R	
NORMAL FLASHING OPERATION	12" FL/Y	12" FL/Y	12" FL/R	12" FL/R	

WIRING KEY

A,B,C,D - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

E,F - 2 CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO. 12 A.W.G.)

- 12 PAIR JELLY FILLED TELEMETRY INTERCONNECT CABLE

- 3 CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

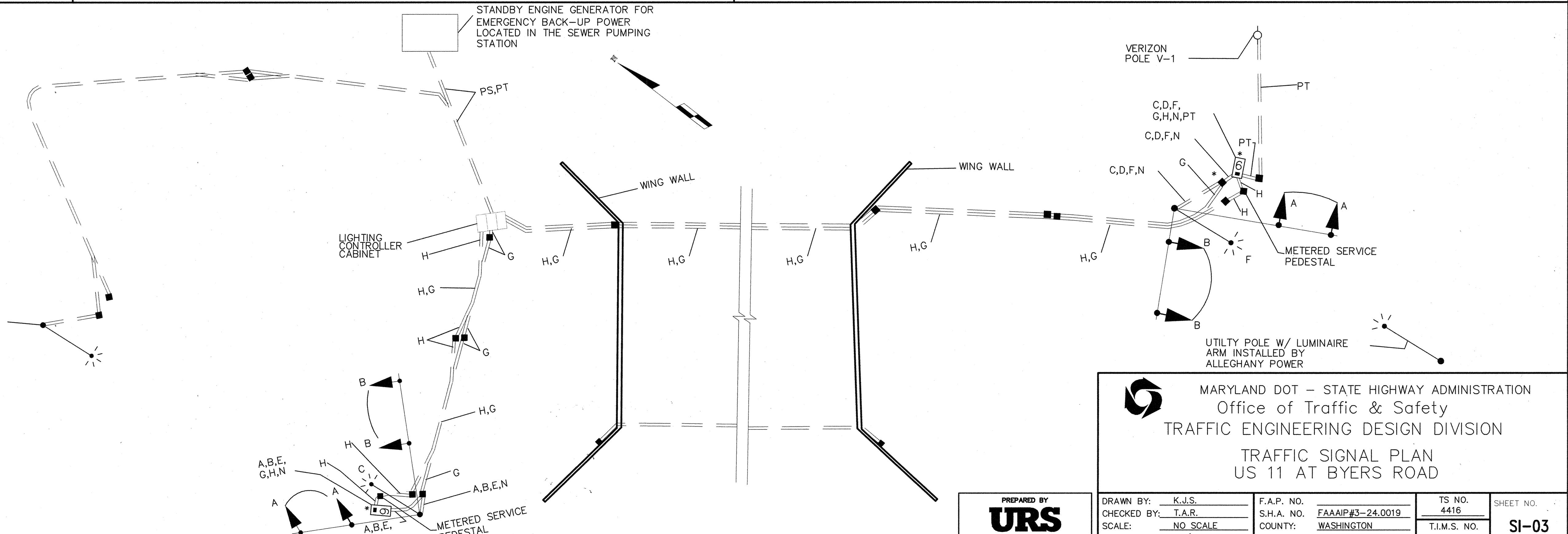
- STRANDED BARE COPPER GROUNDWIRE (NO. 6 A.W.G.)

PS - PROPOSED UNDERGROUND ELECTRICAL SERVICE

PT - PROPOSED UNDERGROUND TELEPHONE SERVICE

3/4 IN DIA X 10 FT GROUND ROD (SEE SPECIFICATION SECTION 804—GROUNDING, SPECIAL PROVISIONS)

UTILTY POLE W/ LUMINAIRE ARM. REFER TO SHEET E3.01, ELECTRICAL UNDERGROUND UTILITIES ALIGNMENT I, FOR INSTALLATION REQUIREMENTS.



05/2005

WASHINGTON T.I.M.S. NO. G 680 LOG MILE: <u>21001109.18</u>

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